

# Installation, Maintenance and Repairs to Electrical Equipment from a Portable Ladder - SOP

## 1. PURPOSE

1.1. To ensure the health and safety of Shoalhaven Water workers and associated workers while installing, maintaining and repairing Electrical equipment from a portable ladder.

### 2. RELATED DOCUMENTS

- 2.1. P12 Managing Plant
- 2.2. P09 Safety Training
- 2.3. P10 Risk Management
- 2.4. P28 Energy Isolation
- 2.5. Relevant SWI's
- 2.6. Relevant Code of Practice

#### 3. RESOURCES REQUIRED

- 3.1. Personal Protective Equipment
- 3.2. Ensure appropriate emergency rescue equipment as outlined in Site Specific Checklist is available and in serviceable condition.
- 3.3. Ensure appropriate hand tools are available for task and in Serviceable condition.
- 3.4. Ensure fully stocked first aid equipment is available.
- 3.5. Barricades as outlined in Site Specific Checklist are available and in serviceable condition.
- 3.6. Portable Ladders suitable for task
- 3.7. Test Meter/s
- 3.8. Energy Isolation Device/s if needed
- 3.9. Isolation Checklist and Protective Sleeve

## 4. DESCRIPTION

- 4.1. Worker completing the work must have an Electrical Qualified Supervisor Certificate (Licensed Electrician) or Unlicensed Electrical/Apprentice under direct supervision. A minimum of one person on-site must have First Aid training.
- 4.2. All workers together on-site must complete the Site Specific Risk Assessment including documenting hazards identified and control measures taken. Ensure the work site is suitability barricaded from public access if required. Subsequent risk assessments are to be completed if the method of work activity used, conditions or workers change. Particular care must be taken handling and securing the ladder during windy conditions. Completion of a Risk Assessment Checklist Working at Heights is required where there is a risk of a person falling more than 2 metres, or where work is carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres.



- 4.3. Check site for suitable base for ladder. Unload ladder from vehicle, check for condition, and suitability for work and verify identity label. Install ladder into position and ensure footing of feet is solid and stable. Ladder rungs must be horizontal/level.
- 4.4. Secure the bottom of ladder to the work structure or secure the foot of the ladder by a second worker if extension ladder is being used. If required, secure the top of the ladder to the work structure while the ladder is being stabilised by the second worker. Step ladders over 2 metres can be stabilised by a second worker if required and in some cases step ladders may be able to be secured at the top to the work structure. Maintain 3 points of contact with ladder when ascending and descending.
- 4.5. As determined by Site Specific Risk Assessment, if required, secure harness above top of ladder or to a suitable attachment point. Control measures must be implemented to prevent workers from falling. All material and equipment used at heights, must also have control measures to prevent falling.
- 4.6. Where required, Personal Protective Equipment must be worn at all times. Ensure second worker has a hard hat on. As a minimum, the crew should carry a mobile phone, necessary tools and have a first aid kit available.
- 4.7. Tools and equipment should be raised or lowered between work area and ground using a pole bag and lanyard where practicable.
- 4.8. Confirm electrical isolation before starting any work, follow P28 Energy Isolation and Barricading.
- 4.8. The equipment to be worked on needs to be checked to ensure it is within safe reach of the worker to carry out the work. If it is determined that it is unsafe to carry out the work from a ladder, then cease work and revise work procedure. E.g. elevated work platform.
- 4.10. Workers aloft must;
  - 4.10.1 Be Confined Space trained if applicable
  - 4.10.2 Have no medical constraints for working at heights
  - 4.10.3 Be comfortable working at heights
  - 4.10.4 Must be "Working at Heights" trained, if working over 2 metres.
- 4.11. Maintain communications with the second worker to allow for safe delivery and retrieval of tools and parts.
- 4.12. Leave area clean at completion of work.